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Montana's Oil and Gas Tax Holiday: Analysis and Recommendation for Change

A Report of The Policy Institute

Prepared by Bob Decker, Executive Director

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The Policy Institute

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The Policy Institute blends authoritative research and hands-on political engagement to create public policy based on economic justice, fair taxation, corporate accountability and environmental responsibility.

SUMMARY

Over the past 30 years, the Montana Legislature has steadily reduced the tax responsibility of the oil and gas industry in the state. Decisions by the 1999 Legislature alone reduced tax revenue to the state and counties by hundreds of millions of dollars in subsequent years. The most influential of tax reduction methods has been the oil and gas tax "holiday," which discounts tax rates on new wells for defined periods of time.

This analysis finds that academic research, empirical data, and the actions of other oil- and gas-producing states collectively refute the assertion that the level of taxation is a significant factor in decisions related to oil and gas development, and that questions of reserve quantities, market prices, technological advances, and access to markets are more important considerations. The analysis concludes with a recommendation for a new structure of oil and gas taxation in Montana that will both increase revenue to state and local governments and assure fairness through tax rates that vary with market prices of the resources.

BACKGROUND

Taxation of the oil and natural gas industry by local, state, and federal governments has long been used to generate revenue for the support of public programs. This analysis examines oil and gas taxation by the State of Montana, with particular emphasis on a policy currently in place and known as the oil and gas tax "holiday."

Oil and gas taxation takes many forms, including severance, i.e., production, taxes (usually applied to the gross taxable value of the produced resource), ad valorem taxes, excise taxes, indemnity taxes, net proceeds taxes, and various kinds of fees. Several oil- and gas-producing states apply a mix of taxation methods, and many states utilize different formulas or tax rates for oil and gas, respectively.

Over the years, Montana has utilized several forms of oil and gas taxation. The idea of a tax "holiday," or a period of time during which the production from an oil or gas well, usually a newly drilled one, is allowed a discount from the standard severance tax rate, dates to at least 1979, when the Montana Legislature exempted production from natural gas wells drilled to depths of 5,000 feet or more.

Another useful benchmark is 1981, when the Legislature increased the state's severance tax on oil from 2.65 to 5 percent for 1982-83 and to 6 percent thereafter. Montana's severance tax on oil had not been increased since 1962, and the 1981 increase was proposed to offset a reduction in vehicle license taxes.

Since 1981, however, the predominant theme in the modification of oil and gas taxation in Montana has been to reduce the tax responsibility of oil and gas producers. In several of the legislative sessions since that year, Montana lawmakers have enacted various tax "incentives" for the oil and gas industry, justified as necessary to promote exploration and development

during times when prices, especially for oil, had fallen from the levels of preceding years. Those changes usually took the form of reduced severance tax rates for new wells, stripper wells (those approaching the end of their economic life), horizontally drilled wells, and enhanced oil recovery projects (those utilizing new methods or technology to extend production). In addition to generally reducing taxes for the oil and gas industry during this period, the changes enacted by the Montana Legislature often contributed to the complexity of the state's oil and gas taxation structure.

By 1995, Montana had, in addition to a State Severance Tax (for support of the state's general fund), a Privilege and License Tax (to support the operation of the State Board of Oil and Gas Conservation), a Resource Indemnity and Groundwater Assessment Tax (for a reclamation trust fund), a Local Government Severance Tax (to finance county governments), and a Net Proceeds Tax (a flat severance tax in lieu of property tax on oil and gas used to fund local governments). In that year's legislative session, Montana lawmakers enacted Senate Bill 412, which consolidated the state's various oil and gas taxes and, according to the bill's promoters, simplified the state system. In the same year, Senate Bill 338 expanded the holiday concept by providing a 24-month exemption from state severance tax on production for oil and gas wells drilled after March 31, 1995.

In 1999, again under the banners of "simplification" and "incentive," the Montana Legislature reduced tax rates for various methods of oil and gas production. With enactment of Senate Bill 530, severance tax rates for all oil wells drilled before 1985 were reduced from 13.9 to 12.5 percent (natural gas was reduced from 18.55 to 14.8 percent). For new wells, i.e., those drilled after 1999, the basic severance rate on oil was reduced from 12.5 to 9.0 percent (natural gas from 14.8 to 9.0 percent). For horizontally drilled wells, the top severance rate on oil was reduced from 12.5 to 9.0 percent for wells drilled after 1999 (natural gas from 15.5 percent to 9.0 percent). The defined size of stripper oil wells was expanded from 10 to 15 barrels per day, and the severance rates for stripper wells were also reduced.

"Promoters and defenders of oil and gas tax incentives in Montana have offered little evidence to demonstrate a direct connection between lower oil and gas tax rates and job creation or economic growth."

In addition, the 1999 Legislature redefined the tax holiday for oil and natural gas. Applying to wells drilled after 1999, the holiday period was set at 12 months for vertical wells and 18 months for horizontal wells. During the holiday period, the severance rate is 0.5 percent (for both oil and gas); upon expiration of the holiday period, the rate returns to the basic level of 9.0 percent (both oil and gas).

In 2005, the Legislature enacted a "bonus" tax reduction for oil stripper wells producing 3 barrels per day or less,

dropping the severance rate from 12.5 to 6 percent when the price of West Texas Intermediate crude oil was above $38 per barrel.[1]

RATIONALE FOR THE HOLIDAY

Senate Bill 530 was the 1999 bill that defined the current holiday terms. At the time (and for all reductions in Montana tax rates since the 1980s), the case for lowering tax rates for oil and gas production was that the tax breaks would create jobs and promote economic growth in the state. The tax incentive was needed, the argument continued, because of low oil and gas market prices (oil was selling for about $20 per barrel in 1999).

Promoters and defenders of oil and gas tax incentives in Montana have offered little evidence to demonstrate a direct connection between lower oil and gas tax rates and job creation or economic growth. The advocates for incentives frequently argue that increased oil production in Montana since the mid-1990s reflects the tax breaks passed in that period by the Legislature. Indeed, oil production in Montana ended several years of decline around 1995, when significant tax breaks were enacted, held steady for about six years (at 1.4 million barrels per month), then rose dramatically to its 2007 level (approximately 3 million barrels per month). In addition, the number of new horizontal wells, a category that received particular attention in tax rate reductions, rose from a negligible level in 1995 to a level that produced about two thirds of all oil production in Montana by 2007.

Thus, a correlation exists between tax incentives and oil production, but is it causal, and if so, to what degree? At least three other factors explain the pattern of Montana's oil production since 1995:

1) Price: Oil, selling for less than $20 per barrel (in 2007 dollars) in 1994, experienced a two-year rise, then dipped in 1996-97. In 1998, oil prices began the sharp and generally steady rise that led to a 2007 average price of $66 per barrel and to a June 2008 high of $147 per barrel.

2) Discovery: Around 1995, the East Lookout Butte field began to produce, and the Cedar Creek Anticline Re-Development began in 1997. The biggest discovery, however, was the Elm Coulee Field, in Richland County, which began producing in 2000 and by 2005 had doubled Montana's total oil output, meaning that this one new field was producing more oil in Montana than all other fields in the state combined.

3) Technology: Drilling methods and equipment evolved markedly during the 1990s. The use of horizontal drilling, though not new to oil extraction, increased rapidly as technology advanced,

[1] Unless otherwise noted, oil prices provided in this analysis are for West Texas Intermediate, the most common benchmark for U.S. oil prices. Montana-produced oil typically sells for less than West Texas Intermediate because of transportation and marketing factors.

oil prices rose, and the geology of Montana's predominant new field, Elm Coulee, proved highly suitable for the horizontal approach.

Another argument given for lowering Montana's oil and gas tax rates is that lower production rates in neighboring states draw development away from Montana. This is the established race-to-the-bottom approach to taxation wherein taxing jurisdictions (states, local governments) compete for business investment by vying to be the most generous and least demanding host. Currently, for example, industry representatives and local boosters in eastern Montana have complained that oil and gas tax rates in North Dakota are now lower than those of Montana and are thus attracting most available oil rigs, leaving Montana with too few rigs to adequately develop new resources.

ANALYSES OF THE TAX INCENTIVE QUESTION

There is a diversity of approaches to oil and gas taxation taken by states, and some states tax less than others. Once again, however, one must question how differences in tax rates figure into the investment decisions made by oil and gas companies as compared to other factors, such as product price, labor availability and quality, the ease of transporting the extracted product to markets, and the quantity, quality, and accessibility of the resource.

Expressed in fundamental terms: How significant a factor is the level of state taxation in decisions by oil and gas companies to develop resources in particular states?

A reasonable answer to the question must transcend both ideological clichés, e.g., "Reducing taxes is always good for the economy," and the too-simple reference to a correlation between higher production with lowered severance taxes that ignore the influential factors of reserves, market price, geology, and technological advances. Yet, given the variety of tax methods in oil- and gas-producing states, together with the sizable state revenue to states generated by the taxes, there are relatively few published analyses of the relative importance of state taxation to company decisions about where, when, and how much to invest in oil and gas development.

One applicable study on the subject is "Mineral Tax Incentives, Mineral Production, and the Wyoming Economy," a paper published in 2000 by the University of Wyoming. One of the questions addressed by that paper resembled the one we posed above:

> "[T]o what extent do taxes, tax incentives, and environmental regulations alter employment and other economic activity in Wyoming as compared with what would occur in their absence?"

The study answers this question in the context of various tax-change scenarios, including a once-and-for-all reduction of 2 percentage points in severance tax on oil, a 2 percentage-point reduction for one year and an elimination of the incentive after that time, and a severance tax reduction of 4 percentage points in perpetuity.

Estimated production increases, as well as tax revenue decreases, vary with each scenario, but the outcomes are similar: changes in oil and gas drilling and production attributable to lower tax rates are relatively small, but for state coffers "the overall story is one of a substantial loss of revenue."

"Why is the response of oil and gas output so small when production taxes are changed or tax incentives are applied?" asks the Wyoming study. Four reasons are given:

1) "A reduction in production taxes offers no direct stimulus for exploration." Because production is predominantly driven by reserves, a reduction in severance tax does little to increase production, whereas an incentive to drill, as opposed to produce, would lead to greater discovery and more production.

2) "Production taxes and tax incentives are deductible against federal corporate income tax liabilities." When severance tax rates are lowered, federal income tax liabilities rise. Thus, to a certain degree, when a state lowers its severance tax, the oil and gas companies are required to yield a certain percentage of their gains in the form of increased federal taxes.

3) "A reduction in production tax rates by, say, 2 percentage points has only a small impact on the net-of-tax price received by operators." By the time an oil company accounts for all federal, state, and local taxes, as well as royalties, a reduction in severance tax rate adds up to a relatively small increase in the after-tax price per barrel of oil.

4) "Fourth, and most importantly, production of (as contrasted with exploration for) oil and gas is driven mainly by reserves, not by prices[2], production tax rates, or production tax incentives. This is a basic fact of geology and petroleum engineering and is easily illustrated by Wyoming's own history of oil production." The study notes that Wyoming's production declined from 1970 to 1997, even during the late 1970s and early 1980s, when oil prices rose by a factor of more than 10. "Thus," the paper concludes, "even comparatively large price increases or tax reductions are not expected to call forth much additional output."

A more recent analysis was published by Headwaters Economics, a nonprofit research group in Bozeman. "Energy Revenue in the Intermountain West: State and Local Government Taxes and Royalties from Oil, Natural Gas, and Coal" compares the taxing strategies of five Intermountain West States – Colorado, Montana, New Mexico, Utah, and Wyoming – and how the respective

[2] This statement about the relative unimportance of price as a factor in production offers some contrast with a statement made in the subsequent discussion of a study published by Headwaters Economics. Both papers agree, however, that resource reserves is a primary factor and tax rate is a minor factor.

states direct their revenues to fund public programs and build long-term wealth. Importantly, the study examines the relationship between tax rates, resource development, and tax revenue.

The Headwaters study finds that Montana's effective tax rate is toward the lower end of the five-state scale, which includes Colorado at 6.2 percent, Montana at 9.8 percent, Utah at 12.1 percent, New Mexico at 15.0 percent, and Wyoming at 15.9 percent. Montana's rate has dropped significantly since 2001, when it, along with New Mexico's effective rate, was the highest of the five states.

To illustrate its findings on how state tax rates affect mineral exploration and government revenue, the Headwaters study compared the policy paths taken by Montana and Wyoming in the late 1990s, when energy prices were low and production levels were flat in both states. In 1999, Montana lowered its basic tax rates and enacted the holiday rates, and Wyoming also lowered its severance tax rate by 2 percent.

In 2000, however, Wyoming repealed the 2 percent tax break it had enacted in 1999, and in subsequent years made other changes that elevated its effective tax rate the subject minerals to 15.9 percent, the highest of the five profiled states. Thus, Wyoming opted to increase oil and gas tax rates, while Montana chose to lower them. This is how the Headwaters study characterized the results of the two approaches:

> "Both states have experienced a surge in natural gas drilling and an increase in commodity prices since 2000. Wyoming added over $10 billion in production value and Montana about $2 billion between 2000 and 2006. New drilling continues in Wyoming at a faster pace than in Montana, and Wyoming's energy economy is significant. There is little evidence in the overall figures to suggest that firms fled Wyoming's higher tax climate and moved to Montana."

Like the Wyoming study cited earlier in this analysis, the Headwaters report raises the "caution about drawing too many conclusions about industry activities from tax rates alone." Yet it offers this summary finding on the subject:

> "The oil, natural gas and coal industries are guided chiefly by the location of reserves, and are less able to relocate than are industries with mobile capital resources (such as textile mills or auto-makers). Other factors such as price, access to markets (e.g., oil and natural gas pipelines), and technology have more significant effects on industry activities. We also find no evidence to suggest that the dramatically different effective tax rates in the Intermountain West have led to more or less investment from state to state .... Wyoming has captured proportionately higher benefits than Montana from the current surge in energy production value, and there is no evidence that Montana's tax breaks worked – Montana has stimulated less, not more energy development than Wyoming and left more than a half a billion in revenue on the table."

TWO OTHER STATES

For oil, North Dakota applies a gross production tax rate of 5 percent and an "extraction" tax rate of 6.5 percent. In 2007, the state's Legislature enacted a tax holiday on oil production by reducing rates for new wells in the Bakken Formation (from 11.5 to 7 percent for the first 75,000 barrels of production or the first 18 months, whichever occurs earlier). In addition, the state offers various reduced rates or exemptions for new horizontal wells, new wells drilled on Indian land, workover wells, stripper wells, enhanced recovery wells, and other qualifying wells.

In 2007, the Alaska Legislature approved a major tax increase on the oil industry. In the fiscal year ending June 30, 2008, it raised an estimated $6 billion and doubled the tax revenue from the previous year. The tax, applied to the net profit of oil produced from state-owned land, is highest in Prudhoe Bay, where the state collects 25 percent of the net profit when oil is selling at or below $52 per barrel. The tax percentage then increases with the price of oil, so that the state gets $49 when oil is at $120 per barrel. ConocoPhillips, the oil company, has said that, with all taxes and fees considered, the state collects about 75 percent of the value of a barrel of oil.

"To put the revenue loss to the General Fund in perspective, the revenue loss from the 1999 oil and gas tax breaks in Fiscal Year 2007 was approximately $73 million, or about 4 percent of the 2007 General Fund revenue of $1.8 billion."

COST OF THE HOLIDAY IN MONTANA

When the Headwaters Economics report stated that Montana "left more than a half a billion in revenue on the table" (as referenced above), it was referring to the tax revenue lost as a result of tax breaks awarded by the Montana Legislature. In September 2008, the Montana Department of Revenue released an analysis of impacts on state tax revenue from oil and gas tax changes passed by the 2009 Montana Legislature and signed by then-Governor Marc Racicot. Spanning the five-year period, 2003-2007, the analysis addresses not only the holiday element of the changes, i.e., the reduced rates on new wells, but the reduced basic severance tax on all wells drilled after 1999.

According to the Department of Revenue analysis, Montana's state government, together with its oil- and gas-producing counties, experienced a loss of $515 million in revenue during the five-year period, 2003-2007, as a result of the 1999 tax changes. In that period, the state and counties collected $584 million through oil and gas taxation; had the 1999 changes not been made (and assuming constant production levels), the state would have collected $944 million.

During the same five-year period, 2003-2007, the decreased revenue to state and county governments due to just the holiday element of the tax structure was $258 million ($205 million for oil and $53 million for gas).

The state takes about 55 percent of the revenue from oil and gas taxation, while the share for oil- and gas-producing counties is 45 percent. Ninety percent of the state's revenue share goes to the General Fund, and the remaining 10 percent is distributed to the Coal Bed Methane, Research and Development Grants, University SSR, and Orphan Share accounts.

To put the revenue loss to the General Fund in perspective, the revenue loss from the 1999 oil and gas tax breaks in Fiscal Year 2007 was approximately $73 million, or about 4 percent of the 2007 General Fund revenue of $1.8 billion.

RESTORING BALANCE TO OIL AND GAS TAXATION IN MONTANA

Any equitable proposal for changing the structure of oil and gas taxation in Montana should reflect these precepts:

1) While it may be desirable to provide incentives through the tax system to promote specific forms of economic development, such incentives should be established with evidence that they will serve as central motivating factors in the investment deliberations of the beneficiaries of the incentives. Because tax incentives can either decrease public revenue or increase tax burdens on others – and oftentimes both – they should be established only with a compelling rationale for their effectiveness, and they should be continued only with proof that they are functioning as intended.

2) Because energy issues reverberate so powerfully in people's lives – from the cost of heating a home to the question of climate change to concerns about national security – it is tempting to focus anxiety about the volatility and impacts of energy issues on the oil and gas industry. Yet, while the oil and gas industry should be held fully accountable for its role in the economic, environmental, and diplomatic problems of our time, no tax policy should be enacted for punitive reasons. Tax policy for the oil and gas industry should be based on the same, fairness-based standards used for other taxpaying constituencies.

With regard to the first precept, there is evidence, e.g., the Wyoming academic analyses, that oil and gas severance tax rates are not a major factor in the development decisions of industry; rather, the question of resource reserve quantities is the predominant factor in development decisions. The situation in Alaska since that state enacted large tax increases in 2007 appears to corroborate this idea, in that the oil and gas industry, which vigorously opposed those tax hikes, has neither departed the state nor visibly relaxed its development objectives because of higher taxes. Alaska's sizable resource reserves and the escalation of global oil and gas prices in recent years (until mid-2008) appear to have dictated the scale and pace of development in the state.

The history of Alaska's 2006 tax policy changes is still in its initial stage, however, so any forthcoming analyses on the ramifications of the state's severance tax increase should be illuminating.

In Montana, with no evidence to demonstrate that the holiday element of tax-reducing legislation enacted in 1999 significantly affected resource development, and with data showing that the holiday has cost state and county governments $500 million from 2003 to 2007, the reasonable course of action is for the Montana Legislature, at its next opportunity, to repeal the holiday statute and reinstitute the basic production tax rate to all new wells. (For wells currently paying taxes at holiday rates, it is fair to allow them to continue paying those rates until the expiration of their holiday periods.)

With regard to the second precept, i.e., maintaining fairness in taxation, a tax structure for oil and gas production should account for both the cost of production and the volatility of product prices. These two factors suggest that a sliding scale for a production tax is appropriate, so that as the market price for the product rose, the tax rate would rise also. This approach would minimize the tax burden on producers when prices and, thus, industry profits were lower, and it would ensure a fair industry contribution to the public weal when prices, and profits, were high.

Our recommendation for sliding-scale taxation of oil and gas production in Montana is below:

OIL:

Market Price	Tax Rate
Less than $40/barrel	9.0%
$40-$80/barrel	12.5%
$80-$100/barrel	15.0%
$100-$120/barrel	20.0%
$120-$150/barrel	25.0%
Greater than $150/barrel	30.0%

NATURAL GAS:

Market Price	Tax Rate
Less than $6/mcf	9.0%
$6-$8/mcf	12.5%
$8-$10/mcf	25.0%
$10-$12/mcf	20.0%
$12-$14/mcf	25.0%
Greater than $14/mcf	30.0%

The effect of the above structure is twofold: 1) it removes the tax holiday for all new wells; and 2) it applies a lower tax rate when product price is low and increases the rate as prices increase. The recommended structure leaves the reduced production tax rates set by the 1999 Legislature in place for oil and gas when prices are below $40/barrel and $6/mcf, respectively.

To understand how this suggested tax matrix would affect revenue to state and local governments, it is instructive to apply it to oil and gas production during the years 2003-2007, the period during which the Department of Revenue estimated a loss of $500 million in revenue as a result of tax changes made by the 1999 Legislature. When the 1999 tax structure is replaced by the The Policy Institute's matrix, it shows that the revenue loss during the five-year period would have been approximately $50 million, or $450 less than what was actually experienced.

The hypothetical increase of $450 million in revenue from 2003-2007 would have been comprised of $296.3 million from oil production and $154.4 million from gas production. Approximately 83 percent of the increased revenue from both oil and gas, respectively, would have been generated by the absence of a holiday rate during the period; 17 percent of the increase would have been generated for both resources, respectively, by the increase in basic, or "regular," production tax rates during periods of higher prices.

The Policy Institute's recommended matrix would have produced no additional revenue from production taxed at the regular, or non-holiday, tax rates in 2003 and 2004, when oil and gas market prices were moderate (oil averaged approximately $33/barrel during the period, and gas averaged approximately $5.17/MCF). In 2005-2007, however, when oil and gas prices climbed significantly, The Policy Institute's matrix would have produced increased regular tax revenue by approximately $75 million.

Applied to production in 2008, when the average price of oil was $95/barrel and that of gas was $8.03/MCF, The Policy Institute's recommended matrix would have generated $206 million in additional revenue to state and local governments in Montana. Of that total, 57 percent would have come from the rescission of holiday tax rates, and 43 percent from elevated regular production tax rates.

VIEW TO THE FUTURE

Given the number and volatility of variables (resource reserves, discoveries, market prices, access to market, technological advances, and others) that influence oil and gas production, it is difficult to predict tax revenue, no matter what method of taxation is used. As for how The Policy Institute's recommended tax matrix would affect revenue, these relationships can be hypothesized:

- If oil and gas production in Montana declined due to decreasing resource reserves, yet prices remained relatively moderate and constant, tax revenue from The Policy Institute's matrix (and from any other production-based tax mechanism) would decline. If a declining-production scenario were characterized by a smaller percentage of new wells, which, under the existing tax structure, would be eligible for holiday tax discounts, the difference

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between revenues produced by The Policy Institute's matrix and the existing matrix would narrow over time.

- If oil and gas production in Montana remained relatively constant at 2008 levels and prices remained moderate and stable, it would infer that new discoveries were being made and reserves were not decreasing. In this scenario, The Policy Institute's matrix would produce significant revenue gains, primarily because new wells would not be subject to holiday discounts.

- If market prices for either oil or gas increased significantly - for example, to $80/barrel or $8/MCF, respectively – and reserves declined, the revenue gains from The Policy Institute's matrix would be significant. As time passed and the proportion of new wells decreased, the revenue increase would be increasingly attributable to higher regular production tax rates and not to non-holiday taxation of new wells.

Additional scenarios can be conceived, but in most, if not all, of them, The Policy Institute's proposed matrix would result in higher public revenue and, given the evidence cited in this report, no measurable loss in oil and gas development because of higher taxes on production.

Montana's taxation on the extraction of oil and gas should be accomplished through a system that reflects the value and irreplaceability of the resource, recognizes the hierarchy of factors that influence development, and assures fairness by applying variable tax rates over the full spectrum of market price possibilities.

Appendix 1: "Analysis of Oil and Natural Gas Tax Production Incentives for Production in Calendar Years 2003 through 2007"
(Montana Department of Revenue, Office of Tax Policy and Research, September 2, 2008)

ANALYSIS OF OIL AND NATURAL GAS TAX PRODUCTION INCENTIVES FOR PRODUCTION IN CALENDAR YEARS 2003 THROUGH 2007

OIL

GOVERNMENT ENTITY	PRODUCTION YEAR	Percent Reduction due to Incentive Rates	Tax Distributed (Current Law)	Total Tax without Reduction in Tax due to Reduced Rate Incentives	Total Reduced Rate Incentives	Holiday Horizontal 18 Month	Holiday Vertical 12 Month	Horizontal Recomplete	Secondary	Stripper Bonus (<3 bbl/day)	Stripper Exemption (<3 bbl/day)	Stripper 10-15 Bbl/Day	Reduced Rate For Post-99 Production
COUNTY PORTION	2003	28%	21,827,155	30,462,018	8,634,863	3,346,577	650,674	334,143	258,252	0	1,128,460	169,089	2,747,668
COUNTY PORTION	2004	36%	35,257,375	54,686,825	19,429,450	10,516,958	1,284,219	435,415	0	0	331,594	0	6,861,264
COUNTY PORTION	2005	44%	55,829,734	99,430,541	43,600,807	26,119,736	562,729	405,910	0	592,556	3,821	302	15,915,753
COUNTY PORTION	2006	42%	69,997,465	120,483,956	50,486,491	27,513,582	861,554	300,893	0	1,142,587	0	0	20,667,875
COUNTY PORTION	2007	35%	87,307,757	133,406,735	46,098,978	23,595,675	1,127,200	108,960	0	1,190,924	0	0	20,076,219
FIVE YEAR TOTAL		38%	270,219,486	438,470,075	168,250,589	91,092,528	4,486,376	1,585,321	258,252	2,926,067	1,463,875	169,391	66,268,779
STATE PORTION	2003	27%	26,476,608	36,343,607	9,866,999	4,249,158	737,600	408,040	374,529	0	565,891	141,654	3,390,127
STATE PORTION	2004	36%	41,141,533	64,588,621	23,447,088	12,852,137	1,488,564	487,076	0	0	190,007	0	8,429,304
STATE PORTION	2005	44%	65,105,399	115,750,940	50,645,541	30,314,398	647,139	476,130	0	401,119	3,237	164	18,803,354
STATE PORTION	2006	41%	80,727,292	137,386,063	56,658,771	30,839,668	894,044	355,427	0	915,213	0	0	23,654,419
STATE PORTION	2007	34%	100,175,713	151,441,914	51,266,201	26,068,810	1,098,684	144,814	0	951,412	0	0	23,002,481
FIVE YEAR TOTAL		38%	313,626,545	505,511,145	191,884,600	104,324,171	4,866,031	1,871,487	374,529	2,267,744	759,135	141,818	77,279,685
COUNTY & STATE	2003	28%	48,303,763	66,805,625	18,501,862	7,595,735	1,388,274	742,183	632,781	0	1,694,351	310,743	6,137,795
COUNTY & STATE	2004	36%	76,398,908	119,275,446	42,876,538	23,369,095	2,772,783	922,491	0	0	521,601	0	15,290,568
COUNTY & STATE	2005	44%	120,935,133	215,181,481	94,246,348	56,434,134	1,209,868	882,040	0	993,675	7,058	466	34,719,107
COUNTY & STATE	2006	42%	150,724,757	257,870,019	107,145,262	58,353,250	1,755,598	656,320	0	2,057,800	0	0	44,322,294
COUNTY & STATE	2007	34%	187,483,470	284,848,649	97,365,179	49,664,485	2,225,884	253,774	0	2,142,336	0	0	43,078,700
FIVE YEAR TOTAL		38%	583,846,031	943,981,220	360,135,189	195,416,699	9,352,407	3,456,808	632,781	5,193,811	2,223,010	311,209	143,548,464

NATURAL GAS

GOVERNMENT ENTITY	PRODUCTION YEAR	Percent Reduction due to Incentive Rates	Tax Distributed (Current Law)	Total Tax without Reduction in Tax due to Reduced Rate Incentives	Total Reduced Rate Incentives	Holiday Horizontal 18 Month	Holiday Vertical 12 Month	Horizontal Recomplete	Secondary	Stripper Bonus (<3 bbl/day)	Stripper Exemption (<3 bbl/day)	Stripper (<60 mcf/day)	Reduced Rate For Post-99 Production
COUNTY PORTION	2003	36%	12,476,092	19,387,333	6,911,241	172,513	1,703,046		0			1,229,489	3,806,193
COUNTY PORTION	2004	40%	18,288,046	30,477,840	12,189,794	600,357	3,511,040		0			1,631,154	6,447,243
COUNTY PORTION	2005	42%	27,765,381	48,140,710	20,375,329	1,959,597	4,433,363		0			2,494,146	11,488,223
COUNTY PORTION	2006	44%	24,199,338	43,102,211	18,902,873	3,198,672	2,931,009		0			1,866,023	10,907,169
COUNTY PORTION	2007	47%	24,746,894	46,885,759	22,138,865	6,140,946	3,019,999		0			1,761,659	11,216,261
FIVE YEAR TOTAL		43%	107,475,751	187,993,853	80,518,102	12,072,085	15,598,457		0			8,982,471	43,865,089
STATE PORTION	2003	36%	11,142,301	17,475,776	6,333,475	210,649	1,535,335		0			1,006,181	3,581,310
STATE PORTION	2004	42%	16,060,620	27,515,979	11,455,158	607,574	3,377,009		0			1,260,042	6,210,533
STATE PORTION	2005	44%	25,289,334	44,888,609	19,599,275	2,161,219	4,153,464		0			1,943,060	11,341,532
STATE PORTION	2006	44%	22,506,130	40,247,465	17,741,336	2,810,130	2,830,751		0			1,508,935	10,591,520
STATE PORTION	2007	46%	23,249,187	42,946,819	19,697,632	4,639,128	2,894,578		0			1,431,914	10,732,012
FIVE YEAR TOTAL		43%	98,247,771	173,074,647	74,826,876	10,428,700	14,791,137		0			7,150,132	42,456,907
COUNTY & STATE	2003	36%	23,618,393	36,863,109	13,244,716	383,162	3,238,381		0			2,235,670	7,387,503
COUNTY & STATE	2004	41%	34,348,666	57,993,819	23,644,952	1,207,931	6,888,049		0			2,891,196	12,657,776
COUNTY & STATE	2005	43%	53,054,715	93,029,319	39,974,604	4,120,816	8,586,827		0			4,437,206	22,629,755
COUNTY & STATE	2006	44%	46,705,468	83,349,676	36,644,209	6,008,802	5,761,760		0			3,374,958	21,498,689
COUNTY & STATE	2007	47%	47,996,081	89,832,578	41,836,497	10,780,074	5,914,577		0			3,193,573	21,948,273
FIVE YEAR TOTAL		43%	205,723,522	361,068,500	155,344,978	22,500,785	30,389,594		0			16,132,603	86,321,996

OIL & NATURAL GAS COMBINED

GOVERNMENT ENTITY	PRODUCTION YEAR	Percent Reduction due to Incentive Rates	Tax Distributed (Current Law)	Total Tax without Reduction in Tax due to Reduced Rate Incentives	Total Reduced Rate Incentives	Holiday Horizontal 18 Month	Holiday Vertical 12 Month	Horizontal Recomplete	Secondary	Stripper Bonus (<3 bbl/day)	Stripper Exemption (<3 bbl/day)	Stripper 10-15 Bbl/Day	Reduced Rate For Post-99 Production
COUNTY PORTION	2003	31%	34,303,247	49,849,351	15,546,104	3,519,090	2,353,720	334,143	258,252	0	1,128,460	1,398,578	6,553,861
COUNTY PORTION	2004	37%	53,545,421	85,164,665	31,619,244	11,117,315	4,795,259	435,415	0	0	331,594	1,631,154	13,308,507
COUNTY PORTION	2005	43%	83,595,115	147,571,251	63,976,136	28,079,333	4,996,092	405,910	0	592,556	3,821	2,494,448	27,403,976
COUNTY PORTION	2006	42%	94,196,803	163,586,167	69,389,364	30,712,254	3,792,563	300,893	0	1,142,587	0	1,866,023	31,575,044

EFFECT ON STATE FUNDS

OIL

Reduction to Coal Bed Methane Account	Reduction to R & D Grants Account	Reduction to Orphan Share Account	Reduction to University SSR Account	Reduction to State General Fund	Total Reduction to State
121,364	291,076	291,076	261,475	8,902,008	9,866,999
288,399	691,689	691,689	621,348	21,153,963	23,447,088
622,940	1,494,043	1,494,043	1,342,107	45,692,408	50,645,541
696,903	1,671,434	1,671,434	1,501,457	51,117,543	56,658,771
630,574	1,512,353	1,512,353	1,358,554	46,252,367	51,266,201
2,360,180	5,660,595	5,660,595	5,084,941	173,118,289	191,884,600

NATURAL GAS

Reduction to Coal Bed Methane Account	Reduction to R & D Grants Account	Reduction to Orphan Share Account	Reduction to University SSR Account	Reduction to State General Fund	Total Reduction to State
77,902	186,838	186,838	167,837	5,714,060	6,333,475
140,898	337,927	337,927	303,562	10,334,844	11,455,158
241,071	578,179	578,179	519,381	17,682,465	19,599,275
218,218	523,369	523,369	470,145	16,006,235	17,741,336
242,261	581,080	581,080	521,987	17,771,204	19,697,632
920,370	2,207,393	2,207,393	1,982,912	67,508,806	74,826,876

OIL & NATURAL GAS COMBINED

Reduction to Coal Bed Methane Account	Reduction to R & D Grants Account	Reduction to Orphan Share Account	Reduction to University SSR Account	Reduction to State General Fund	Total Reduction to State

Appendix 1: "Analysis of Oil and Natural Gas Tax Production Incentives for Production in Calendar Years 2003 through 2007"
(Montana Department of Revenue, Office of Tax Policy and Research, September 2, 2008)

ANALYSIS OF OIL AND NATURAL GAS TAX PRODUCTION INCENTIVES FOR PRODUCTION IN CALENDAR YEARS 2003 THROUGH 2007

EFFECT ON STATE FUNDS

COUNTY PORTION	2007	38%	112,054,651	180,292,494	68,237,843	29,736,621	4,147,199	108,960	0	1,190,924	0	1,761,659	31,292,480					
FIVE YEAR TOTAL		40%	377,695,237	626,463,928	248,768,681	103,164,613	20,084,833	1,585,321	258,252	2,926,067	1,463,875	9,151,862	110,133,868					
STATE PORTION	2003	30%	37,618,909	53,819,383	16,200,474	4,459,807	2,272,935	408,040	374,529	0	565,891	1,147,835	6,971,437	199,266	477,914	477,914	429,313	14,616,067	16,200,474
STATE PORTION	2004	38%	57,202,353	92,104,600	34,902,246	13,459,711	4,865,573	487,076	0	0	190,007	1,260,042	14,639,837	429,298	1,029,616	1,029,616	924,910	31,488,806	34,902,246
STATE PORTION	2005	44%	90,394,733	160,639,549	70,244,816	32,475,617	4,800,603	476,130	0	401,119	3,237	1,943,224	30,144,886	864,011	2,072,222	2,072,222	1,861,488	63,374,873	70,244,816
STATE PORTION	2006	42%	103,233,422	177,633,528	74,400,107	33,649,798	3,724,795	355,427	0	915,213	0	1,508,935	34,245,939	915,121	2,194,803	2,194,803	1,971,603	67,123,777	74,400,107
STATE PORTION	2007	37%	123,424,900	194,388,733	70,963,833	30,707,938	3,993,262	144,814	0	951,412	0	1,431,914	33,734,493	872,855	2,093,433	2,093,433	1,880,542	64,023,570	70,963,833
FIVE YEAR TOTAL		39%	411,874,316	678,585,792	266,711,476	114,752,871	19,657,168	1,871,487	374,529	2,267,744	759,135	7,291,950	119,736,592	3,280,551	7,867,988	7,867,988	7,067,856	240,627,093	266,711,476
COUNTY & STATE	2003	31%	71,922,156	103,668,734	31,746,578	7,978,897	4,626,655	742,183	632,781	0	1,694,351	2,546,413	13,525,298						
COUNTY & STATE	2004	38%	110,747,774	177,269,265	66,521,490	24,577,026	9,660,832	922,491	0	0	521,601	2,891,196	27,948,344						
COUNTY & STATE	2005	44%	173,989,848	308,210,800	134,220,952	60,554,950	9,796,695	882,040	0	993,675	7,058	4,437,672	57,548,862						
COUNTY & STATE	2006	42%	197,430,225	341,219,695	143,789,471	64,362,052	7,517,358	656,320	0	2,057,800	0	3,374,958	65,820,983						
COUNTY & STATE	2007	37%	235,479,551	374,681,227	139,201,676	60,444,559	8,140,461	253,774	0	2,142,336	0	3,193,573	65,026,973						
FIVE YEAR TOTAL		39%	789,569,553	1,305,049,720	515,480,167	217,917,484	39,742,001	3,456,808	632,781	5,193,811	2,223,010	16,443,812	229,870,460						

Department of Revenue
Office of Tax Policy and Research
Vern Fogle, economist
September 2, 2008

Appendix 2: "Montana Oil and Natural Gas Production Tax FY 2002 through FY 2008" (Montana Department of Revenue, Office of Tax Policy and Research, February 4, 2009)

Year	Category	Production (bbl/MCF)	Gross Value	Gross Royalty Value	Exempt Royalty Value	Taxable Royalty Value	Stripper 1-10 bbl/day Value	Working Interest Value	Royalty Tax	Stripper 1-10 bbl/day Tax	Working Interest Tax	Total Tax	Royalty Tax Rate	Stripper Tax Rate	Working Interest Tax Rate	BOGC Tax Rate	Royalty Tax Rate Without BOGC Tax Rate	Stripper Tax Rate Without BOGC Tax Rate	Wi Tax Rate Without BOGC Tax Rate
FY 2002	Gas - horiz first 18 mo	527,971	$1,403,040	$211,349	$32,372	$178,974	$0	$1,192,115	$26,954	$0	$9,060	$36,014	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2002	Gas - regular post99	16,392,736	$33,454,376	$5,573,117	$1,160,460	$4,412,663	$0	$27,881,251	$664,547	$0	$2,581,804	$3,246,351	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2002	Gas - regular pre99	7,823,168	$14,092,080	$2,039,477	$545,978	$1,493,498	$0	$12,052,602	$224,921	$0	$1,815,122	$2,040,043	15.06%	5.76%	15.06%	0.26%	14.80%	5.50%	14.80%
FY 2002	Gas - stripper pre99	10,629,317	$20,344,340	$3,130,979	$1,011,317	$2,119,662	$0	$17,213,416	$319,224	$0	$1,938,231	$2,257,455	15.06%	5.76%	11.26%	0.26%	14.80%	5.50%	11.00%
FY 2002	Gas - vertical first 12 mo	11,160,190	$20,563,862	$3,294,749	$776,377	$2,518,383	$0	$17,211,583	$379,269	$0	$130,808	$510,077	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2002	Oil - horiz first 18 mo	1,646,539	$34,936,891	$4,909,813	$1,244,440	$3,665,370	$0	$30,152,835	$552,005	$0	$229,162	$781,166	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2002	Oil - horiz recomp first 18 mo	559,305	$11,696,192	$1,588,609	$594,419	$994,190	$0	$10,107,582	$149,725	$0	$582,197	$731,922	15.06%	5.76%	5.76%	0.26%	14.80%	5.50%	5.50%
FY 2002	Oil - regular pre99	9,812,816	$165,298,968	$24,411,728	$6,661,688	$17,750,049	$0	$140,887,239	$2,673,157	$0	$17,977,212	$20,650,369	15.06%	5.76%	12.76%	0.26%	14.80%	5.50%	12.50%
FY 2002	Oil - regular post99	941,498	$16,061,395	$2,315,933	$566,096	$1,749,838	$0	$13,745,462	$263,526	$0	$1,272,830	$1,536,355	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2002	Oil - secondary incremental	1,107,686	$24,587,384	$2,610,426	$817,292	$1,793,134	$0	$21,976,958	$270,046	$0	$1,925,182	$2,195,227	15.06%	5.76%	8.76%	0.26%	14.80%	5.50%	8.50%
FY 2002	Oil - stripper bonus	492,236	$8,722,606	$1,221,540	$150,755	$1,070,781	$0	$7,501,081	$161,260	$0	$57,008	$218,268	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2002	Oil - stripper exemption	5,139	$94,930	$11,126	$3,398	$7,726	$0	$83,803	$1,164	$0	$637	$1,800	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2002	Oil - stripper over/under 10 bbl/day post99	1,822	$36,488	$2,917	$0	$2,917	$33,571	$0	$439	$1,934	$0	$2,373	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2002	Oil - stripper over/under 10 bbl/day pre99	1,500,484	$29,436,249	$4,729,596	$841,439	$3,888,151	$23,623,912	$1,107,494	$585,556	$1,360,737	$102,554	$2,048,847	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2002	Oil - vertical first 12 mo	509,971	$11,259,297	$1,726,332	$229,331	$1,497,001	$0	$9,406,895	$225,448	$0	$71,492	$296,941	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2003	Gas - horiz first 18 mo	770,453	$2,951,765	$460,108	$76,594	$383,512	$0	$2,496,042	$57,757	$0	$18,970	$76,727	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2003	Gas - regular post99	21,845,996	$65,911,232	$10,370,138	$2,577,044	$7,793,085	$0	$55,541,108	$1,173,639	$0	$5,143,107	$6,316,745	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2003	Gas - regular pre99	8,073,377	$24,068,994	$3,384,192	$1,026,321	$2,357,880	$0	$20,684,815	$355,097	$0	$3,115,133	$3,470,230	15.06%	5.76%	15.06%	0.26%	14.80%	5.50%	14.80%
FY 2003	Gas - stripper pre99	12,800,465	$42,966,757	$6,693,288	$2,694,028	$3,999,261	$0	$36,273,489	$602,292	$0	$4,084,395	$4,686,687	15.06%	5.76%	11.26%	0.26%	14.80%	5.50%	11.00%
FY 2003	Gas - vertical first 12 mo	9,379,236	$27,106,925	$3,910,548	$1,211,636	$2,698,926	$0	$23,201,622	$406,458	$0	$176,332	$582,791	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2003	Oil - horiz first 18 mo	2,461,498	$69,639,997	$10,053,553	$2,317,713	$7,735,837	$0	$59,586,442	$1,165,017	$0	$452,857	$1,617,874	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2003	Oil - horiz recomp first 18 mo	412,640	$11,061,394	$1,501,292	$537,803	$963,489	$0	$9,560,103	$145,101	$0	$550,662	$695,763	15.06%	5.76%	5.76%	0.26%	14.80%	5.50%	5.50%
FY 2003	Oil - regular pre99	8,801,106	$241,107,607	$35,950,258	$9,255,221	$26,695,029	$0	$205,157,344	$4,020,272	$0	$26,178,077	$30,198,349	15.06%	5.76%	12.76%	0.26%	14.80%	5.50%	12.50%
FY 2003	Oil - regular post99	1,677,728	$46,708,967	$6,796,882	$1,417,811	$5,379,074	$0	$39,912,094	$810,089	$0	$3,695,860	$4,505,949	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2003	Oil - secondary incremental	1,380,720	$37,427,985	$4,392,039	$1,510,606	$2,881,433	$0	$33,035,946	$433,944	$0	$2,893,949	$3,327,893	15.06%	5.76%	8.76%	0.26%	14.80%	5.50%	8.50%
FY 2003	Oil - stripper bonus	512,456	$12,905,081	$1,771,357	$237,139	$1,534,229	$0	$11,133,762	$231,055	$0	$84,617	$315,672	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2003	Oil - stripper exemption	9,643	$244,290	$38,468	$950	$37,521	$0	$205,821	$5,651	$0	$1,564	$7,215	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2003	Oil - stripper over/under 10 bbl/day post99	5,626	$135,764	$25,833	$5,884	$19,949	$109,931	$0	$3,004	$6,332	$0	$9,336	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2003	Oil - stripper over/under 10 bbl/day pre99	1,270,669	$32,013,064	$5,098,393	$1,033,536	$4,064,853	$25,670,322	$1,244,351	$612,167	$1,478,611	$115,227	$2,206,004	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2003	Oil - vertical first 12 mo	539,637	$15,163,748	$2,588,169	$319,398	$2,268,771	$0	$12,575,584	$341,677	$0	$95,574	$437,251	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2004	Gas - horiz first 18 mo	1,679,767	$8,320,175	$1,355,936	$143,507	$1,212,429	$0	$6,964,233	$182,592	$0	$52,928	$235,520	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2004	Gas - regular post99	30,502,244	$121,135,452	$18,414,456	$5,465,306	$12,949,149	$0	$102,720,978	$1,950,142	$0	$9,511,963	$11,462,105	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2004	Gas - regular pre99	14,420,322	$57,241,494	$8,345,376	$2,321,728	$6,023,657	$0	$48,896,093	$907,163	$0	$7,363,751	$8,270,914	15.06%	5.76%	15.06%	0.26%	14.80%	5.50%	14.80%
FY 2004	Gas - stripper pre99	18,839,815	$82,155,577	$12,635,846	$4,977,703	$7,658,160	$0	$69,519,704	$1,153,319	$0	$7,827,919	$8,981,239	15.06%	5.76%	11.26%	0.26%	14.80%	5.50%	11.00%
FY 2004	Gas - vertical first 12 mo	18,616,745	$74,437,970	$11,427,615	$3,351,453	$8,076,169	$0	$63,015,551	$1,216,271	$0	$478,918	$1,695,189	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2004	Oil - horiz first 18 mo	5,368,635	$171,929,709	$27,276,392	$3,715,627	$23,560,767	$0	$144,653,310	$3,548,252	$0	$1,099,365	$4,647,617	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2004	Oil - horiz recomp first 18 mo	487,781	$15,178,107	$2,161,878	$970,375	$1,191,518	$0	$13,016,213	$179,443	$0	$749,734	$929,176	15.06%	5.76%	5.76%	0.26%	14.80%	5.50%	5.50%
FY 2004	Oil - regular pre99	11,148,113	$335,760,067	$49,676,393	$12,833,367	$36,843,011	$0	$286,083,673	$5,548,558	$0	$36,504,277	$42,052,834	15.06%	5.76%	12.76%	0.26%	14.80%	5.50%	12.50%
FY 2004	Oil - regular post99	3,146,641	$99,495,764	$13,867,114	$3,105,022	$10,762,091	$0	$85,628,638	$1,620,771	$0	$7,929,212	$9,549,983	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2004	Oil - stripper bonus	545,824	$14,167,313	$1,871,228	$417,894	$1,453,308	$0	$12,296,089	$218,868	$0	$93,450	$312,319	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2004	Oil - stripper exemption	5,735	$160,861	$26,748	$2,256	$24,491	$0	$134,114	$3,688	$0	$1,019	$4,708	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2004	Oil - stripper over/under 10 bbl/day post99	451	$10,562	$2,112	$0	$2,112	$8,450	$0	$318	$487	$0	$805	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2004	Oil - vertical first 12 mo	1,052,013	$34,437,969	$5,757,711	$610,871	$5,146,836	$0	$28,680,251	$775,114	$0	$217,970	$993,084	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2005	Gas - horiz first 18 mo	5,806,915	$34,536,447	$5,579,646	$472,802	$5,106,848	$0	$28,956,795	$769,091	$0	$220,072	$989,163	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2005	Gas - regular post99	38,194,996	$184,400,242	$28,604,599	$8,915,520	$19,689,080	$0	$155,795,632	$2,965,175	$0	$14,426,676	$17,391,851	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2005	Gas - regular pre99	11,667,181	$54,716,753	$7,911,130	$2,243,575	$5,667,560	$0	$46,805,612	$853,534	$0	$7,048,925	$7,902,460	15.06%	5.76%	15.06%	0.26%	14.80%	5.50%	14.80%
FY 2005	Gas - stripper pre99	21,554,943	$107,118,153	$16,692,000	$5,938,227	$10,753,779	$0	$90,426,176	$1,619,519	$0	$10,181,988	$11,801,507	15.06%	5.76%	11.26%	0.26%	14.80%	5.50%	11.00%
FY 2005	Gas - vertical first 12 mo	19,333,887	$90,604,946	$13,819,714	$5,280,191	$8,539,518	$0	$76,785,235	$1,286,051	$0	$583,568	$1,869,619	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2005	Oil - horiz first 18 mo	11,848,753	$556,978,656	$91,301,214	$8,820,268	$82,480,948	$0	$465,677,439	$12,421,631	$0	$3,539,149	$15,960,779	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2005	Oil - horiz recomp first 18 mo	361,018	$15,938,425	$2,384,733	$769,723	$1,615,010	$0	$13,553,693	$243,221	$0	$780,693	$1,023,913	15.06%	5.76%	5.76%	0.26%	14.80%	5.50%	5.50%
FY 2005	Oil - regular pre99	10,959,757	$480,933,477	$71,432,713	$18,222,714	$53,209,998	$0	$409,500,752	$8,013,426	$0	$52,252,296	$60,265,722	15.06%	5.76%	12.76%	0.26%	14.80%	5.50%	12.50%
FY 2005	Oil - regular post99	4,983,378	$228,590,215	$33,065,023	$6,359,980	$26,705,043	$0	$195,525,194	$4,021,779	$0	$18,105,633	$22,127,412	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2005	Oil - stripper bonus	2,083	$102,112	$17,659	$12,819	$4,841	$0	$84,452	$729	$0	$642	$1,371	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2005	Oil - stripper exemption	628	$25,062	$5,013	$0	$5,013	$0	$20,050	$755	$0	$152	$907	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2005	Oil - stripper over/under 10 bbl/day post99	414	$16,633	$3,327	$0	$3,327	$13,306	$0	$501	$766	$0	$1,267	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2005	Oil - vertical first 12 mo	487,345	$22,307,947	$3,755,192	$593,096	$3,162,097	$0	$18,552,753	$476,212	$0	$141,001	$617,213	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2006	Gas - horiz first 18 mo	8,237,419	$67,440,073	$11,050,398	$1,240,273	$9,810,126	$0	$56,389,676	$1,477,405	$0	$428,561	$1,905,966	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2006	Gas - regular post99	48,767,925	$326,916,070	$50,849,112	$16,840,398	$34,008,723	$0	$276,066,958	$5,121,714	$0	$25,563,800	$30,685,514	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2006	Gas - regular pre99	9,623,954	$62,075,327	$8,992,842	$2,720,416	$6,272,417	$0	$53,082,481	$944,626	$0	$7,994,222	$8,938,848	15.06%	5.76%	15.06%	0.26%	14.80%	5.50%	14.80%
FY 2006	Gas - stripper pre99	20,543,585	$135,410,701	$21,535,844	$7,104,095	$14,431,758	$0	$113,874,856	$2,173,423	$0	$12,822,309	$14,995,732	15.06%	5.76%	11.26%	0.26%	14.80%	5.50%	11.00%
FY 2006	Gas - vertical first 12 mo	18,065,984	$122,919,518	$17,834,886	$6,428,753	$11,406,136	$0	$105,084,632	$1,717,764	$0	$798,643	$2,516,407	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2006	Oil - horiz first 18 mo	15,048,617	$892,646,080	$143,081,924	$15,162,541	$127,919,388	$0	$749,566,157	$19,264,660	$0	$5,696,703	$24,961,363	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2006	Oil - horiz recomp first 18 mo	274,579	$14,936,599	$2,228,180	$691,063	$1,537,117	$0	$12,708,419	$231,490	$0	$732,005	$963,495	15.06%	5.76%	5.76%	0.26%	14.80%	5.50%	5.50%
FY 2006	Oil - regular pre99	9,651,276	$527,666,608	$79,492,754	$21,104,328	$58,388,433	$0	$448,173,844	$8,793,298	$0	$57,186,983	$65,980,281	15.06%	5.76%	12.76%	0.26%	14.80%	5.50%	12.50%
FY 2006	Oil - regular post99	9,096,363	$518,805,974	$78,819,264	$11,993,868	$66,825,397	$0	$439,986,707	$10,063,905	$0	$40,742,769	$50,806,674	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2006	Oil - stripper bonus post99	11,444	$675,518	$110,250	$2,548	$107,701	$0	$565,270	$16,220	$0	$35,386	$51,606	15.06%	5.76%	6.26%	0.26%	14.80%	5.50%	6.00%
FY 2006	Oil - stripper bonus pre99	660,913	$36,630,518	$5,514,710	$1,233,071	$4,281,639	$0	$31,115,804	$644,815	$0	$1,947,849	$2,592,664	15.06%	5.76%	6.26%	0.26%	14.80%	5.50%	6.00%
FY 2006	Oil - stripper exemption pre99	859	$43,402	$6,099	$0	$6,099	$0	$37,303	$919	$0	$284	$1,202	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2006	Oil - vertical first 12 mo	351,341	$20,586,030	$3,600,446	$746,606	$2,853,840	$0	$16,985,584	$429,788	$0	$129,090	$558,879	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2007	Gas - horiz first 18 mo	10,466,518	$97,829,632	$10,222,565	$1,556,714	$8,665,852	$0	$87,607,068	$1,305,077	$0	$665,814	$1,970,891	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2007	Gas - regular post99	56,004,040	$293,543,620	$45,785,221	$14,763,109	$31,022,115	$0	$247,758,392	$4,671,931	$0	$22,942,427	$27,614,358	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2007	Gas - regular pre99	7,779,752	$39,638,695	$5,648,523	$1,836,786	$3,811,738	$0	$34,190,172	$574,048	$0	$5,149,040	$5,723,088	15.06%	5.76%	15.06%	0.26%	14.80%	5.50%	14.80%
FY 2007	Gas - stripper pre99	20,328,395	$105,654,100	$17,324,150	$5,530,456	$11,793,701	$0	$88,329,958	$1,776,131	$0	$9,945,954	$11,722,085	15.06%	5.76%	11.26%	0.26%	14.80%	5.50%	11.00%
FY 2007	Gas - vertical first 12 mo	15,090,907	$73,998,906	$11,540,443	$4,061,248	$7,479,196	$0	$62,458,461	$1,126,367	$0	$474,684	$1,601,051	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2007	Oil - horiz first 18 mo	11,536,172	$677,144,554	$109,237,992	$12,665,025	$96,572,965	$0	$567,906,564	$14,543,889	$0	$4,316,090	$18,859,978	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2007	Oil - horiz recomp first 18 mo	122,496	$6,656,519	$1,015,742	$376,270	$639,473	$0	$5,640,777	$96,305	$0	$324,909	$421,213	15.06%	5.76%	5.76%	0.26%	14.80%	5.50%	5.50%
FY 2007	Oil - regular pre99	9,541,006	$502,073,593	$74,878,367	$19,711,688	$55,166,679	$0	$427,195,232	$8,308,102	$0	$54,510,112	$62,818,213	15.06%	5.76%	12.76%	0.26%	14.80%	5.50%	12.50%
FY 2007	Oil - regular post99	13,960,132	$778,653,374	$120,254,660	$16,722,341	$103,532,321	$0	$658,398,714	$15,591,968	$0	$60,967,721	$76,559,688	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%

Appendix 2: "Montana Oil and Natural Gas Production Tax FY 2002 through FY 2008" (Montana Department of Revenue, Office of Tax Policy and Research, February 4, 2009)

Year	Category	Production (bbl/MCF)	Gross Value	Gross Royalty Value	Exempt Royalty Value	Taxable Royalty Value	Stripper 1-10 bbl/day Value	Working Interest Value	Royalty Tax	Stripper 1-10 bbl/day Tax	Working Interest Tax	Total Tax	Royalty Tax Rate	Stripper Tax Rate	Working Interest Tax Rate	BOGC Tax Rate	Royalty Tax Rate Without BOGC Tax Rate	Stripper Tax Rate Without BOGC Tax Rate	Wi Tax Rate Without BOGC Tax Rate
FY 2007	Oil - stripper bonus post99	19,982	$1,047,204	$169,604	$1,433	$168,171	$0	$877,600	$25,326	$0	$54,938	$80,264	15.06%	5.76%	6.26%	0.26%	14.80%	5.50%	6.00%
FY 2007	Oil - stripper bonus pre99	649,217	$34,111,220	$5,154,456	$1,208,055	$3,946,406	$0	$28,956,774	$594,329	$0	$1,812,694	$2,407,023	15.06%	5.76%	6.26%	0.26%	14.80%	5.50%	6.00%
FY 2007	Oil - vertical first 12 mo	372,642	$21,263,898	$4,062,498	$407,640	$3,654,859	$0	$17,201,401	$550,422	$0	$130,731	$681,152	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2008	Gas - horiz first 18 mo	8,879,636	$149,816,520	$10,863,236	$1,562,447	$9,300,789	$0	$138,953,285	$1,400,699	$0	$1,056,045	$2,456,744	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2008	Gas - regular post99	63,854,877	$408,331,361	$65,219,739	$19,433,222	$45,786,516	$0	$343,111,618	$6,895,449	$0	$31,772,136	$38,667,585	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2008	Gas - regular pre99	6,323,870	$38,961,947	$5,623,004	$1,644,854	$3,978,151	$0	$33,338,942	$599,110	$0	$5,020,845	$5,619,954	15.06%	5.76%	15.06%	0.26%	14.80%	5.50%	14.80%
FY 2008	Gas - stripper pre99	18,354,811	$112,915,806	$18,929,157	$5,878,005	$13,051,162	$0	$93,986,652	$1,965,506	$0	$10,582,897	$12,548,403	15.06%	5.76%	11.26%	0.26%	14.80%	5.50%	11.00%
FY 2008	Gas - vertical first 12 mo	12,474,912	$71,017,522	$10,677,512	$3,789,544	$6,887,967	$0	$60,340,009	$1,037,328	$0	$458,584	$1,495,912	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2008	Oil - horiz first 18 mo	7,819,671	$646,364,596	$108,184,858	$9,897,936	$98,286,922	$0	$538,179,738	$14,802,011	$0	$4,090,166	$18,892,176	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2008	Oil - horiz recomp first 18 mo	50,702	$4,266,892	$573,926	$205,489	$368,437	$0	$3,692,966	$55,487	$0	$212,715	$268,201	15.06%	5.76%	5.76%	0.26%	14.80%	5.50%	5.50%
FY 2008	Oil - regular pre99	9,343,365	$809,354,928	$119,147,688	$31,840,994	$87,306,691	$0	$690,207,241	$13,148,388	$0	$88,070,444	$101,218,832	15.06%	5.76%	12.76%	0.26%	14.80%	5.50%	12.50%
FY 2008	Oil - regular post99	15,577,523	$1,403,930,476	$217,195,518	$29,961,030	$187,234,485	$0	$1,186,734,963	$28,197,513	$0	$109,891,658	$138,089,171	15.06%	5.76%	9.26%	0.26%	14.80%	5.50%	9.00%
FY 2008	Oil - stripper bonus post99	14,506	$1,241,939	$207,519	$16,831	$190,688	$0	$1,034,420	$28,718	$0	$64,755	$93,472	15.06%	5.76%	6.26%	0.26%	14.80%	5.50%	6.00%
FY 2008	Oil - stripper bonus pre99	633,638	$53,353,524	$8,101,337	$1,920,160	$6,181,171	$0	$45,252,189	$930,884	$0	$2,832,787	$3,763,671	15.06%	5.76%	6.26%	0.26%	14.80%	5.50%	6.00%
FY 2008	Oil - stripper exemption post99	122	$13,386	$2,677	$0	$2,677	$0	$10,709	$403	$0	$81	$485	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%
FY 2008	Oil - vertical first 12 mo	493,067	$42,152,269	$8,048,648	$1,201,851	$6,846,797	$0	$34,103,620	$1,031,128	$0	$259,188	$1,290,315	15.06%	5.76%	0.76%	0.26%	14.80%	5.50%	0.50%

DEPARTMENT OF REVENUE
TAX POLICY AND RESEARCH
GENTAX COMPUTER SYSTEM
Vern Fogle, economist
2/4/2009

Appendix 3: "Tax Revenue Impacts from the Application of the Tax Rate Matrix Recommended by The Policy Institute to Montana Oil and Natural Gas Production, 2003-2008"
(The Policy Institute, February 24, 2009)

2003	GAS ($4.88) [1]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$2.5 M	$18,970	12.2	$231,434	$212,464
	Regular (post 1999)	$55.5 M	$5,100,000	1.2	$5,100,000	$0
	Vertical (12 months)	$23.2 M	$176,332	12.2	$2,147,200	$1,970,868
	Total Gas	-	$5,295,302	-	$7,478,634	$2,183,332
	OIL ($28) [2]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$59.6 M	$452,857	12.2	$5,526,600	$5,073,743
	Regular (post 1999)	$39.9 M	$3,700,000	1.2	$3,700,000	$0
	Vertical (12 months)	$12.6 M	$95,574	12.2	$1,159,000	$1,063,426
	Total Oil	-	$4,248,431	-	$10,385,600	$6,137,169
	Total Gas and Oil	-	$9,543,733	-	$17,864,234	$8,320,501
2004	GAS ($5.46) [1]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$7.0 M	$235,520	12.2	$2,867,000	$2,631,480
	Regular (post 1999)	$102.7 M	$9,500,000	1.2	$9,500,000	$0
	Vertical (12 months)	$63 M	$1,700,000	12.2	$20,740,000	$19,040,000
	Total Gas	-	$11,435,520	-	$33,107,000	$21,671,480
	OIL ($37) [2]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$144.6 M	$1,100,000	12.2	$13,420,000	$12,320,000
	Regular (post 1999)	$85.6 M	$7,900,000	1.2	$7,900,000	$0
	Vertical (12 months)	$26.7 M	$993,084	12.2	$12,114,600	$11,121,516
	Total Oil	-	$9,993,084	-	$33,434,600	$23,441,516
	Total Gas and Oil	-	$21,428,604	-	$66,541,600	$45,112,996
2005	GAS ($7.33) [1]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$29.1 M	$989,163	16.8	$16,615,200	$15,626,037
	Regular (post 1999)	$155.8 M	$17,400,000	1.4	$24,360,000	$6,960,000
	Vertical (12 months)	$76.8 M	$1,900,000	16.8	$31,920,000	$30,020,000
	Total Gas	-	$20,289,163	-	$72,895,200	$52,606,037
	OIL ($50) [2]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$465.7 M	$3,500,000	16.8	$58,000,000	$54,500,000
	Regular (post 1999)	$195.5 M	$18,100,000	1.4	$25,340,000	$7,240,000
	Vertical (12 months)	$18.6 M	$141,001	16.8	$2,368,800	$2,227,799
	Total Oil	-	$21,741,001	-	$85,708,800	$63,967,799
	Total Gas and Oil	-	$42,030,164	-	$158,604,000	$116,573,836

Appendix 3: "Tax Revenue Impacts from the Application of the Tax Rate Matrix Recommended by The Policy Institute to Montana Oil and Natural Gas Production, 2003-2008"
(The Policy Institute, February 24, 2009)

2006	GAS ($6.39) [1]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$56.4 M	$428,561	16.8	$7,199,824	$6,771,263
	Regular (post 1999)	$276.1 M	$25,600,000	1.4	$35,840,000	$10,240,000
	Vertical (12 months)	$105.1 M	$798,643	16.8	$13,417,202	$12,618,559
	Total Gas	-	$26,827,204	-	$56,457,026	$29,629,822
	OIL ($60) [2]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$794.6 M	$5,700,000	16.8	$95,760,000	$90,060,000
	Regular (post 1999)	$440.1 M	$40,700,000	1.4	$56,980,000	$16,280,000
	Vertical (12 months)	$17.0 M	$129,090	16.8	$2,168,712	$2,039,622
	Total Oil	-	$46,529,090	-	$154,908,712	$108,379,622
	Total Gas and Oil	-	$73,356,294	-	$211,365,738	$138,009,444
2007	GAS ($6.37) [1]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$87.6 M	$2,000,000	16.8	$33,600,000	$31,600,000
	Regular (post 1999)	$247.8 M	$22,900,000	1.4	$32,060,000	$9,160,000
	Vertical (12 months)	$62.5 M	$474,684	16.8	$7,974,691	$7,500,007
	Total Gas	-	$25,374,684	-	$73,634,691	$48,260,007
	OIL ($67) [2]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$567.9 M	$4,300,000	16.8	$72,240,000	$67,940,000
	Regular (post 1999)	$658.4 M	$61,000,000	1.4	$85,400,000	$24,400,000
	Vertical (12 months)	$17.2 M	$130,731	16.8	$2,196,280	$2,065,549
	Total Oil	-	$65,430,731	-	$159,836,280	$94,405,549
	Total Gas and Oil	-	$90,805,415		$233,470,971	$142,665,556
				-		
2008	GAS ($8.03) [1]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$139.0 M	$1,100,000	20	$22,770,000	$21,670,000
	Regular (post 1999)	$343.1 M	$31,800,000	1.65	$52,470,000	$20,670,000
	Vertical (12 months)	$60.3 M	$458,584	20	$9,492,688	$9,034,104
	Total Gas	-	$33,358,584	-	$84,732,688	$51,374,104
	OIL ($95) [2]	WI Value [3]	WI Tax [4]	TPI Factor [5]	TPI Tax [6]	Difference
	Horizontal (18 months)	$538.2 M	$4,100,000	20	$82,000,000	$77,900,000
	Regular (post 1999)	$1,186.7 M	$109,900,000	1.65	$181,335,000	$71,435,000
	Vertical (12 months)	$34.1 M	$259,188	20	$5,183,760	$4,924,572
	Total Oil	-	$114,259,188	-	$268,518,760	$154,259,572
	Total Gas and Oil	-	$147,617,772	-	$353,251,448	$205,633,676

Appendix 3: "Tax Revenue Impacts from the Application of the Tax Rate Matrix Recommended by The Policy Institute to Montana Oil and Natural Gas Production, 2003-2008"
(The Policy Institute, February 24, 2009)

Notes for Appendix 3:

1) Average annual market price of natural gas (Henry Hub), from U.S. Energy Information Administration, "Natural Gas Navigator," January 29, 2009, http://tonto.eia.doe.gov/dnav/ng/hist/n9190us3a.htm.

2) Average annual market price of oil (West Texas Intermediate) from U.S. Energy Information Administration, "Crude Oil Prices, Table 1, http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/petroleum_marketing_monthly/current/txt/tables01.txt.

3) "WI Value": working interest value, from "Montana Oil and Natural Gas Production Tax FY 2002 through FY 2008," Montana Department of Revenue, Office of Tax Policy and Research, February 4, 2009

4) "WI Tax": working interest tax, from "Montana Oil and Natural Gas Production Tax FY 2002 through FY 2008," Montana Department of Revenue, Office of Tax Policy and Research, February 4, 2009.

5) "TPI Factor": Tax rate multiple, derived from ratio of tax rate recommended by The Policy Institute to actual tax rate during period.

6) "TPI Tax": Tax revenue that would have resulted from application of tax rate recommended by The Policy Institute; derived from multiplication of actual tax revenue ("WI Tax") times tax rate multiple ("TPI Factor").